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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,451	09/21/2004	Marcel Breuwer	NL 020207	3897

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P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

BHARADWAJ, KALPANA

ART UNIT	PAPER NUMBER
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2129

MAIL DATE	DELIVERY MODE
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12/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/508,451

Applicant(s)

BREEUWER, MARCEL

Examiner

Bharadwaj Kalpana

Art Unit

2129

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 1-12 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Stadler (USPN 2002/0016548, referred to as **Stadler**).

Claim 1, 11, 12:

Stadler teaches a method of analyzing a quantity having temporal and spatial variations, wherein a multidimensional output data array is formed (**Stadler**, ¶ 0063: multi-dimensional "spatial vector") the multidimensional output data array comprises array positions arranged along at least a first data-axis and a second data-axis (**Stadler**, ¶ 0065: three axis EGM signals), values of the quantity are entered in the

multidimensional output data array, such that values of the quantity at substantially the same instant are entered at respective positions in the multidimensional output data array at equal positions along the first data-axis (**Stadler**, ¶ 0083: defining a set of sampled time points; **EN**: sampled time points are values at particular instants of time) and values of the quantity at substantially the same spatial position are entered at respective positions in the multidimensional output data array at equal positions along the second data-axis (**Stadler**, ¶ 0063: spatial vectors).

Claim 2:

Stadler teaches a method as claimed in claim 1, wherein values of the quantity are acquired for respective temporal instants and for respective spatial sections and values of the quantity for individual spatial sections are entered at respective positions in the multidimensional output data array at equal positions along the second data-axis (**Stadler**, ¶ 0063: processing spatial vectors; **EN**: processing involves entering positions on the axis).

Claim 3:

Stadler teaches a method as claimed in claim 1, wherein values of the quantity are acquired for respective time intervals (**Stadler**, ¶ Data related to ... generated in real time) and for respective spatial positions and values of the quantity for individual time interval are entered at respective positions in the multidimensional output data array at equal positions along the first data-axis (**Stadler**, ¶ 0073: manipulating the data values).

Claim 4:

Stadler teaches a method as claimed in claim 1, wherein values of the quantity for successive time intervals are entered at adjacent positions (**Stadler**, ¶ 0005: PQRST sequence) in the multidimensional output data array and values of the quantity for adjacent spatial sections are entered at adjacent positions in the multidimensional output data array (**Stadler**, ¶ 0005: successive PQRST complexes).

Claim 5:

Stadler teaches a method as claimed in claim 4, wherein values of the quantity for radially contiguous spatial sections (**Stadler**, ¶ 0139: radians per cardiac cycle) are entered at contiguous positions in the multidimensional output data array (**Stadler**, ¶ 0139: filter characteristics are tuned from empirical data).

Claim 6:

Stadler teaches a method as claimed in claim 1, wherein the values of the quantity are derived from a series of images (**Stadler**, ¶ 0002: monitoring electrocardiogram).

Claim 7:

Stadler teaches a method as claimed in claim 6, wherein values of the quantity at respective instants are derived from respective images in said series of images

(**Stadler**, ¶ 0005: waveform characterized by a periodic PQRST electrical activation sequence).

Claim 8:

Stadler teaches a method as claimed in claim 7, wherein respective positions in the multidimensional output data array are linked to respective spatial sections in respective images of the series (**Stadler**, ¶ 0070: data related to detection ... for later uplink telemetry transmission and analysis).

Claim 9:

Stadler teaches a method as claimed in claim 8, wherein the multidimensional output data array is displayed, a position in the displayed multidimensional output data array is indicated and on the basis of the indicated position in the displayed multidimensional output data array the corresponding image of the series is displayed and the corresponding spatial section in the image is marked (**Stadler**, ¶ 0056: A display 59 would enable graphic and textual interface).

Claim 10:

Stadler teaches a method as claimed in claim 1, wherein the quantity pertains to perfusion of the myocardium (**Stadler**, ¶ 0007: ischemic myocardium).

Examinations Considerations

4. Examiner's Notes (EN) are provided with the cited references to prior art to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but a link to prior art that one of ordinary skill in the art would find inherently appropriate.

5. Examiner has cited particular columns and line numbers (or paragraphs) in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the Applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. The entire reference is considered to provide disclosure relating to the claimed invention.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Prince, USPN 2001/0031037, cited for magnetic resonance imaging.

7. Claims 1-12 are rejected.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bharadwaj Kalpana whose telephone number is (571) 270-1641. The examiner can normally be reached on Monday-Friday 7:30am 5:00 pm EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Vincent can be reached on (571) 272-3080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KB
Dec 14, 2007


DAVID VINCENT
SUPERVISORY PATENT EXAMINER